

IN THE CLAIMS

1-13 (canceled)

14. (previously amended) A system for detecting an edge of an unimaged printing plate mounted on a platesetter for imaging the printing plate, the system comprising:
an external drum for supporting said unimaged printing plate;
a moveable assembly comprising:
 a light source directing light generally normal to said drum; and
 a light sensor for detecting reflected light originating from said light source;
and
two grooves formed into said drum for preventing light from said light source, from being reflected towards said light sensor;
wherein the two grooves are formed diagonally across said drum for detecting a skewed plate, each groove containing an antireflective layer disposed on at least a portion of an inside surface of said grooves.

15-25 (canceled)

26. (previously amended) An apparatus for detecting an edge of imageable media mounted on a support surface of an imagesetter or a platesetter, said apparatus comprising:
a moveable assembly comprising:
 a light source radiating light toward said surface; and
 a light detector for detecting light from said light source; and
two grooves formed into said support surface for preventing light from said source from being directed toward said detector;
wherein said support surface is an internal surface or an external surface of a drum; and wherein the two grooves are diagonally formed into said support surface of said drum for detecting a skewed plate, each groove containing an anti-reflective material.

27. (previously amended) A method for detecting an edge of an imageable plate mounted on an external drum of a platesetter for imaging printing plates, the method comprising:
providing a moveable assembly comprising:

a light source; and
a light sensor responsive to light from said light source;
providing a groove formed into an outside surface of the external drum, said groove having an anti-reflective layer disposed on an inside surface of said groove;
illuminating a portion of said groove with light from the light source, said light applied generally normal to said groove;
detecting an absence of said light reflected from said groove; said absence of reflected light from said groove corresponding to a first signal level generated by said light sensor;
moving said light source along said groove;
detecting light reflected from the imageable plate mounted over a portion of said groove in response to said light from said light source illuminating a portion of the plate as said light source passes over the plate;
said reflected light corresponding to a second signal level generated by said light sensor; and
said edge of the imageable plate being detected when a difference between said first and said second signal levels exceed a predetermined value.

28. (original) A method of detecting a skewed printing plate mounted on an external drum of a platesetter for imaging printing plates, the method comprising the steps of:

providing a moveable assembly comprising:
a light source; and
a light sensor responsive to light from said light source;
positioning said moveable optical assembly at an end of said drum, over a first groove longitudinally formed into said drum;
illuminating a portion of said first groove with a beam of light from said light source, said light beam applied generally normal to said first groove;
detecting an absence of light reflected from said first groove; said reflected light from said first groove corresponding to a first signal level generated by said light sensor;
moving said optical assembly along a path parallel to said first groove while monitoring a first spatial position of said light source;

detecting light reflected from a printing plate mounted over a portion of said first groove in response to said beam of light from said light source illuminating said plate as said light source passes over said plate;

said reflected light from said plate corresponding to a second signal level generated by said light sensor;

recording a first position of said moveable light source when a first difference between said first and said second signal levels exceeds a first predetermined value;

positioning said moveable optical assembly at said end of the drum over a second groove formed into said drum, said second groove formed parallel to said first groove;

illuminating a portion of said second groove with said beam of light from said moveable light source, said light beam applied generally normal to said second groove;

detecting an absence of light reflected from said second groove;

said absence of reflected light from said second groove corresponding to a third signal level generated by said light sensor;

moving said optical assembly along a path parallel to said second groove while monitoring a second spatial position of said light source;

detecting light reflected from said printing plate mounted over a portion of said second groove in response to said beam of light from said light source illuminating said plate as said light source passes over said plate;

said reflected light from said plate corresponding to a fourth signal level generated by said light sensor;

recording a second position of said moveable light source when a second difference between said third and said fourth signal levels exceeds a second predetermined value; and

calculating a third difference between said first position and said second position and determining if said third difference exceeds a third predetermined value indicating a skewed printing plate is mounted on said drum.